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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/552,636	04/19/2000	Shyh-Mei Ho	ST9-99-145	3553
36491	7590	07/13/2004	EXAMINER	
KUNZLER & ASSOCIATES 8 EAST BROADWAY SALT LAKE CITY, UT 84111			HILLERY, NATHAN	
			ART UNIT	PAPER NUMBER
			2176	

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/552,636

Applicant(s)

HO ET AL.

Examiner

Nathan Hillery

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is responsive to communications: Amendment filed on 4/16/04.
2. Claims 1 – 21 are pending in the case. Claims 1, 8, and 15 are independent.
3. The objection to the specification has been withdrawn as necessitated by amendment.
4. The rejection of claims 1 – 21 under 35 U.S.C. 103(a) as being unpatentable has been withdrawn as necessitated by amendment.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. Claims 1 – 3, 7, 8 – 10, 14, 15 – 17, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart (US005715453A) and further in view of IBM (Research Disclosure 423111) and Meltzer et al. (US006125391A).
7. **Regarding independent claim 1**, Stewart teaches that *referring to FIGS. 1 and 7, main memory 120 includes a web server application 122, a transaction processor 124, one or more macro files 126, a configuration file 128, one or more language processors 130, an operating system 134, one or more application programs 136, and program data 138. Application programs 136 are executed by CPU 110 under the control of operating system 134. Application programs 136 can be run with program data 138 as input. Application programs 136 can also output their results as program data 138 in main memory. In the present invention, a computer system 100 is operating as a web server, so CPU 110 executes, among other things, web server application*

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122. Transaction processor 124 is a program that processes an HTML page stored in one or more macro files 126. When transaction processor 124 is initialized, it reads configuration file 128 to correlate different types of queries to different language processors 130. When a query to dynamic data is found in a page, transaction processor 124 determines from the configuration data (read from the configuration file) which language processor 130 it should call to process the query. The appropriate language processor 130 then queries a data source, such as a memory or a database, to retrieve the dynamic data. Language processor 130 passes the dynamic data to transaction processor 124, which inserts the dynamic data into the HTML data for the selected page. (Column 4, lines 12 – 36) and IBM teaches that the text transformation Engine consists of ... Translation Engine which converts HTML to XML ... (page 2, lines 2 – 3). It would have been obvious to the skilled artisan to interpret the combined disclosures of Stewart and that of IBM as providing for **receiving a document comprising a transaction definition encoded in XML and providing the decoded transaction definition to the transaction processing system**, since there is a CICS-based HTML generator that allows interactive creation of Web pages that can manipulate mainframe databases by reading, browsing, and updating VSAM and DB2. This one module can manage any number of different files, including fixed-length and segmented VSAM files, as well as DB2 databases. This program uses CICS-created objects for HTML generation including (but not limited to) file definitions, page definitions, drop-down lists, and Web page text (Column 5, lines 57 – 65) and since IBM teaches that the translation of HTML to well formed XML documents with expanded

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tags is desirable for several reasons (page 2, second paragraph). It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the inventions of Stewart with that of IBM because such a combination would offer the users of Stewart the benefit of *a resulting document optimized for the client device, network link, and browser* (page 2, lines 5 – 6). Neither Stewart nor IBM explicitly teach **obtaining a DTD ... and parsing the XML document using the DTD....** Meltzer et al. teach that *FIG. 4 illustrates a process of receiving and processing an incoming document for the system of FIG. 3. Thus, the process begins by receiving a document at the network interface (step 400). The parser identifies the document type (401) in response to the business interface definition. Using the business interface definition, which stores a DTD for the document in the XML format, the document is parsed (step 402). Next, the elements and attributes of the document are translated into the format of the host (step 403)* (Column 26, lines 19 – 27), which provides for **obtaining a DTD specifying rules for decoding the transaction definition, parsing the XML document using the DTD to decode the transaction definition.** It would have been obvious to one with ordinary skill in the art to combine the inventions of Stewart and IBM with that of Meltzer et al. because such a combination would offer the users of Stewart and IBM *an infrastructure for connecting businesses with customers, suppliers and trading partners ... using self-defining, machine-readable documents* (Column 2, lines 32 – 36).

8. **Regarding dependent claims 2 and 3,** Stewart teaches that *in summary* (referring to FIG. 9), *when transaction processor 124 encounters a function* (e.g.,

function-name) that requires the retrieval of dynamic data, it looks to the function definition portion of macro file 126 to find a token or identifier (ID) corresponding to the function-name. Transaction processor 124 then determines from the data previously read from configuration file 128 which language processor should process a function with that particular ID (Column 8, lines 56 – 66). It would have been obvious to one of ordinary skill in the art at the time of the invention to interpret the disclosure as providing the capabilities so that **the transaction definition comprises an APPLCTN macro nor a TRANSACT macro**, since it would have been obvious to one with ordinary skill in the art to know that if one macro is successfully read and parsed then any macro can be successfully read and parsed, especially a macro with similar functionality.

9. **Regarding dependent claim 7**, Stewart teaches that *referring to FIGS. 1 and 7*, main memory 120 includes a web server application 122, a transaction processor 124, one or more macro files 126, a configuration file 128, one or more language processors 130, an operating system 134, one or more application programs 136, and program data 138. Application programs 136 are executed by CPU 110 under the control of operating system 134. Application programs 136 can be run with program data 138 as input. Application programs 136 can also output their results as program data 138 in main memory. In the present invention, a computer system 100 is operating as a web server, so CPU 110 executes, among other things, web server application 122.

Transaction processor 124 is a program that processes an HTML page stored in one or more macro files 126. When transaction processor 124 is initialized, it reads configuration file 128 to correlate different types of queries to different language

*processors 130. When a query to dynamic data is found in a page, transaction processor 124 determines from the configuration data (read from the configuration file) which language processor 130 it should call to process the query. The appropriate language processor 130 then queries a data source, such as a memory or a database, to retrieve the dynamic data. Language processor 130 passes the dynamic data to transaction processor 124, which inserts the dynamic data into the HTML data for the selected page. (Column 4, lines 12 – 36) and IBM teaches that the text transformation Engine consists of ... Translation Engine which converts HTML to XML ... (page 2, lines 2 – 3). It would have been obvious to the skilled artisan to interpret the combined disclosures of Stewart and that of IBM as providing for **obtaining the transaction definition, obtaining a DTD...** , and **parsing the transaction definition ...**, since there is a CICS-based HTML generator that allows interactive creation of Web pages that can manipulate mainframe databases by reading, browsing, and updating VSAM and DB2. This one module can manage any number of different files, including fixed-length and segmented VSAM files, as well as DB2 databases. This program uses CICS-created objects for HTML generation including (but not limited to) file definitions, page definitions, drop-down lists, and Web page text (Column 5, lines 57 – 65) and since IBM teaches that the translation of HTML to well formed XML documents with expanded tags is desirable for several reasons (page 2, second paragraph). It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the inventions of Stewart with that of IBM because such a combination would*

offer the users of Stewart the benefit of *a resulting document optimized for the client device, network link, and browser* (page 2, lines 5 – 6).

10. **Regarding independent claim 8**, the claim incorporates substantially similar subject matter as claim 1, and is rejected along the same rationale.

11. **Regarding dependent claim 9**, the claim incorporates substantially similar subject matter as claim 2, and is rejected along the same rationale.

12. **Regarding dependent claim 10**, the claim incorporates substantially similar subject matter as claim 3, and is rejected along the same rationale.

13. **Regarding dependent claim 14**, the claim incorporates substantially similar subject matter as claim 7, and is rejected along the same rationale.

14. **Regarding independent claim 15**, the claim incorporates substantially similar subject matter as claim 1, and is rejected along the same rationale.

15. **Regarding dependent claim 16**, the claim incorporates substantially similar subject matter as claim 2, and is rejected along the same rationale.

16. **Regarding dependent claim 17**, the claim incorporates substantially similar subject matter as claim 3, and is rejected along the same rationale.

17. **Regarding dependent claim 21**, the claim incorporates substantially similar subject matter as claim 7, and is rejected along the same rationale.

18. Claims 4, 6, 11, 13, 18, and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart (US005715453A), IBM (Research Disclosure 423111) and Meltzer et al. (US006125391A) as applied to claims 1 – 3, 7, 8 – 10, 14, 15 – 17, and 21

above, and further in view of Iyengar et al. (US006038393A) and Brodsky (XMI Opens Application Interchange).

19. **Regarding dependent claims 4 and 6**, neither Stewart, IBM, nor Meltzer et al. explicitly teach **the DTD comprises an XMI DTD, modeling a transaction definition in ... UML, and processing the UML object model using ... XMI**. However, Iyengar et al. do teach that *the system also transforms legacy business processes, including legacy applications into UML format* (Abstract, lines 4 – 6). It would have been obvious to one with ordinary skill in the art to interpret the disclosure as providing for **the DTD comprises an XMI DTD, modeling a transaction definition in ... UML, and processing the UML object model using ... XMI**, since Brodsky teaches that *once the type of information needed to be exchanged is expressed in UML, XMI will automatically create the DTD and transfer format* (page 7, lines 9 – 10). Further, it would have been obvious to one with ordinary skill in the art to combine the inventions of Stewart, IBM, and Meltzer et al. with that of Iyengar et al. because such a combination would allow the users of the combined invention of Stewart and Meltzer et al. the benefit of *a means of transforming a distinctive representation of business model information into a generalized representation* (Column 2, lines 31 – 33).
20. **Regarding dependent claim 11**, the claim incorporates substantially similar subject matter as claim 4, and is rejected along the same rationale.
21. **Regarding dependent claim 13**, the claim incorporates substantially similar subject matter as claim 6, and is rejected along the same rationale.

22. **Regarding dependent claim 18**, the claim incorporates substantially similar subject matter as claim 4, and is rejected along the same rationale.

23. **Regarding dependent claim 20**, the claim incorporates substantially similar subject matter as claim 6, and is rejected along the same rationale.

24. Claim 5, 12, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart (US005715453A), IBM (Research Disclosure 423111) and Meltzer et al. (US006125391A) as applied to claims 1 – 3, 7, 8 – 10, 14, 15 – 17, and 21 above, and further in view of Leaf (US005754772A).

25. **Regarding dependent claim 5**, neither Stewart, IBM nor Meltzer et al. explicitly teach **receiving the document at a transaction processing system gateway**. Leaf teaches that *an on-line transaction processing system is made accessible to Web Browsers by establishing a predetermined plurality of transaction gateway clients to receive HTTP requests that are received by a Web Server from the Web Browsers* (Column 2, lines 30 – 35), which provide for **receiving the document at a transaction processing system gateway**. It would have been obvious to one with ordinary skill in the art to combine the inventions of Stewart and Meltzer et al. with that of Leaf because such a combination would allow the users of the combined invention of Stewart, IBM, and Meltzer et al. the benefit of *a flexible and efficient means for allowing interoperability between business application software and the World Wide Web* (Column 2, lines 12 – 15).

26. **Regarding dependent claim 12**, the claim incorporates substantially similar subject matter as claim 5, and is rejected along the same rationale.

27. **Regarding dependent claim 19**, the claim incorporates substantially similar subject matter as claim 5, and is rejected along the same rationale.

Response to Arguments

28. Applicant's arguments with respect to claims 1, 8, and 15 have been considered but are moot in view of the new ground(s) of rejection.

29. It is noted that Applicant's amendment significantly changes the scope of the claimed invention when interpreted as a whole.

Conclusion

30. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Hillery whose telephone number is (703) 305-4502. The examiner can normally be reached on M - F, 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on (703) 305-9792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NH


SANJIV SHAH
PRIMARY EXAMINER